

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

•				
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,132	03/10/2000	Yasunao Okazaki	10873.506US01	6038
23552 75	590 02/12/2003			
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER	
			LEE, BENNY T	
			ART UNIT	PAPER NUMBER
			2817	
		DATE MAILED: 02/12/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

Cy S13 132		UNITED STATEL EPARTMENT OF COMPIERCE Patent and Trademark Office  Nddress: COMMISSIONER OF PATENTS AND TRACTICARKS Washington, D.C. 20231		
SERIAL NUMBER FILING DATE		NAMED APPLICANT	ATTORNEY " . T CET NO	
г	•	7 [	EXAMINER	
jan jan ja			ART UNIT PAPE MBER	
			12	
		DAT	E MAILED:	

•			
This	application as been examined Recusive to com-	m. or offlet on 14 No. 2007 This action is made from	
	ned statutory period for response will cause the appli-		
Part I	THE FOLLOWING ATTACH - LINT(S) ARE - RRT OF THI Notice of References Cited by Examiner, 892, Notice of Art Cited by Applicant, PTO-1449 Information on How to Effect Grawing Changes, PTO-1474	indice re Patent Drawing, PTO-948.  Hotice of Informal Patent Application, Form PTO-	
Part II	SURMARY OF ACTION	.*	
1 J	( Claims 2 _ 1 _	are pending in the approximation.	
. /	Of the above, claims	are withdrawn from con	
\2 #	Claims	have been cancelled.	
3.	Claims	are allowed.	
4. 7	Sclaims 2-4,6-10j11-1	are rejected.	
· /	Claimy5	objected:	
	Claims	are subject to restriction or election resonant.	
7.	This application has been filled with inferred drawings whe matter is indicated.	reptates for examination purposes until such time as alla subject	:t
<b>:</b>	Allowable subject matter had by been indicated, formal de-	returned required to response to this Office action.	
9. 🗀	The corrected or substitute it wings have been received not acceptable (see expt. nation).	These drawings are: accontable	
10.		fixe fonal or substitute sheet(s) of drawings, filed on	_•
11 _	The proposed drawing correction, filed	nas been approved. disapproved (see explanation). Howeve	r,
c	the Patent and Trademark Colline no longer makes drawing or corrected. Corrections <u>MUST</u> be effected in accordance with EFFECT DRAWING CHANGES", PTO-1474.		/ T(
12 _	Acknowledgment is made of the claim for priority under 3 = 3	(6.6) 10. The certified copy has peen received not not not received	
	been filed in parent ap Lation, serial no.	; filed on	
12.	Since this application appears to be in condition for allowed accordance with the practice under Ex parte Quayle, 1935 C	. Ace except for formal matters, prosecution as to the merity is close to a C.D. 11: 453 O.G. 213.4	
14.	Other		

SN 523132

Art Unit: 2817

## DETAILED ACTION

1. Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 12-14, note that it is unclear which one of the (plural) "covers" is intended by the recited "said cover".

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2-4, 6,7; 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji in view of Toyoshima (of record).

Tsuji discloses a high frequency circuit element having a metal box (1, 2) containing a high frequency circuit (3a, 3b) therein disposed on a substrate (4). As is evident from fig. 4, input/output terminals (6a, 6b) are disposed in the metal box and are connected to input/output lines (5a, 5b) which are associated with the high frequency circuit (3a, 3b). A cover member (8, 9) is disposed over the high frequency circuit (3a, 3b) as well as the input/output lines (5a, 5b) such as to increase the cutoff frequency. Furthermore, note that because of the nature of the "cover", such a structure would also have been characterized as being a "plate". Note that an increase in cutoff frequency inherently results in cutting off, and thus suppressing, those electromagnetic modes which are outside the range of the cutoff frequency. Furthermore, note that the cover members (8, 9) divide the metal box supporting the high frequency circuit by one-half, thereby

Application/Control Number: 523132

Art Unit: 2817

providing the increased cutoff frequency and corresponding mode suppression. Tsuji differs from the claimed invention in that a lid for the metal box is not explicitly disclosed.

Toyoshima discloses a substrate (3) having a high frequency circuit (4) disposed thereon with input/output terminals (5, 6) connected to the high frequency circuit. The high frequency circuit and substrate are disposed within a metal package or housing (1) having a "lid" (2). Moreover, a metallic coating or conductor (10), a dielectric coating (9) and a resistive film (8) constitute a structure corresponding to applicants' claimed "cover" structure (i.e. since such a structure "covers" the input and output lines as well as the high frequency circuit) Such "cover" being within the interior of the housing, and effectively eliminates unwanted higher order waveguide modes within the metal box.

Accordingly, it would have been obvious in view of the references, taken as a whole, to have added a "lid" to the metal box of Tsuji. Such a modification would have been considered obvious in view of the same field of endeavor of the references (i.e. both pertain to metal boxes with high frequency circuits therein with means for suppressing unwanted modes), thereby suggesting the obviousness of such a modification.

Claims 8-10; 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the preceding rejection as applied to claims 2 & 11, respectively above in view of Buck et al (of record) for reasons of record.

Applicant's arguments with respect to claims 11-17 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2817

Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is (703) 308 4902.

BENNY T. LEE PRIMARY EXAMINER ART UNIT 2817

B. Lee

February 6, 2003